



**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re: Serial No.: 10/565,229 Conf. No.: 9930

Applicant: **Martin BRODT et al.**

Filed: January 20, 2006

Title: **PRESS-HARDENED COMPONENT AND PROCESS
FOR PRODUCING A PRESS-HARDENED
COMPONENT**

Art Unit: 3726

Examiner: Essama OMGBA

Atty Docket No.: 913.1001

Customer No.: 23280

06/15/2010 SDENB083 06000132 10565229

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Mail Stop: APPEAL BRIEF – PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

June 9, 2010

APPEAL BRIEF UNDER 37 C.F.R. § 41.37

Sir:

Appellants submit this brief for the consideration of the Board of Patent Appeals and Interferences (the "Board") in support of their appeal of the Rejection dated December 23, 2009 in this application. The statutory fee of \$270.00 for a small entity filing an appeal brief is paid concurrently herewith. If any additional fees are deemed to be due at this time, the Assistant Commissioner is authorized to charge payment of the same to Deposit Account No. 50-0552.

REAL PARTY IN INTEREST

The real party in interest is Z.A.T. Zinc Anticorrosion Technologies SA, a corporation having a place of business in Pully, Switzerland.

I. RELATED APPEALS AND INTERFERENCES

Appellants, their legal representatives, and assignee are not aware of any appeal, interference or judicial proceeding that directly affects, will be directly affected by, or will have a bearing on the Board's decision in this appeal.

II. STATUS OF CLAIMS

Claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 are pending. Claims 1 to 9, 13, 14, 22, 23, 29 and 30 have been canceled. Claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 have been finally rejected by the Examiner as per the Final Office Action dated December 23, 2009.

The rejection of claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 thus is appealed. A copy of pending claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 is attached hereto as Appendix A.

III. STATUS OF AMENDMENTS

No amendments were filed after the rejection of claims 10 to 12, 15 to 21, 24 to 28 and 31 to 38 in the Final Office Action dated December 23, 2009. A Notice of Appeal was filed on electronically and received by the U.S.P.T.O. on March 12, 2010.

IV. SUMMARY OF THE CLAIMED SUBJECT MATTER

Independent claim 10 recites a process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet (e.g., press-hardened component 1 in Fig. 1f and semi-finished product 2 in Figs. 1a and 2a; page 5, lines 9 to 11 and 21, paragraphs [0024] and [0025]), the process comprising: forming a component blank from the steel semi-finished product using a cold-forming process (e.g., component blank 10 in Figs. 1b and 2b; page 6, lines 16 to 19, paragraph [0027]), the component blank including a margin contour corresponding approximately to a contour of the press-hardened component and a margin edge (e.g., margin contour 12 and margin regions 11 in Figs. 2a and 2b; page 6, lines 19 to 27, paragraph [0027]); trimming the component blank at the margin edge to the margin contour (e.g., Fig. 1b and 2c; page 6, line 30 to page 7, line 4, paragraph [0028]); heating and press-hardening the trimmed component blank using a hot-forming tool (e.g., hot-forming tool 23 in Fig. 1d; page 7, line 23 to page 8, line 22, paragraph [0032] to [0033]); and covering the press-hardened component blank with a corrosion-prevention layer in a coating step (e.g., Fig. 1f; page 9, lines 9 to 11, paragraph [0036]), wherein the coating step includes a thermal diffusion process (e.g., page 9, lines 11 to 20, paragraph [0036]).

Independent claim 20 recites a process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet (e.g., press-hardened component 1 in Fig. 3e and semi-finished product 2 in Figs. 2a and 3a; page 10, lines 11 to 14, paragraph [0040]), the process comprising: heating and press-hardening the semi-finished steel product using a hot-forming tool so as to form a press-hardened component blank (e.g., component blank 10' and hot-forming tool 23' in Fig. 3b; page 10, lines 15 to 22, paragraph [0040]), having a margin contour corresponding approximately to the press-hardened component and a margin edge (e.g., margin contour 12 and margin regions 11 in Figs. 2a and 2b; page 6, lines 19 to 27, paragraph [0027]); trimming the press-hardened component blank at the margin edge to the margin contour (Fig. 3c; page 10, lines 24 to 27, paragraph [0041]); covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step (e.g., Fig. 3e; page 9, lines 9 to 11, paragraph [0036]; page 10, lines 27 to 30, paragraph [0041]), wherein the coating step includes a thermal diffusion process (e.g., page 9, lines 11 to 20,

paragraph [0036])).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Claims 10 to 12, 16 to 21 and 25 to 28 and 31 to 34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicants' Admitted Prior Art (AAPA) in view of Kefferstein et al. (US 6,564,604) and Shtikan et al. (US 7,192,624). Claims 15 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Kefferstein et al., Shtikan et al. and Warichet et al. (US 6,921,439). Claims 35 to 38 were rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Kefferstein et al., Shtikan et al. and Levinski et al. (U.S. Patent 6,171,359).

VII. ARGUMENTS

A. Rejections under 35 U.S.C. 103(a): AAPA, Kefferstein et al. and Shtikan et al.

Claims 10 to 12, 16 to 21 and 25 to 28 and 31 to 34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Applicants' Admitted Prior Art (AAPA) in view of Kefferstein et al. (US 6,564,604) and Shtikan et al. (US 7,192,624).

AAPA is disclosed in the specification at [0001] to [0004].

Kefferstein et al. discloses that conventionally "steel sheets intended for high temperature forming and/or heat treatment are not delivered with a coating in view of the retention of the coating during the heat treatment, as steels are generally heat treated at relatively high temperatures, far in excess of 700 degrees C. Indeed, zinc coating deposited on a metallic surface was considered heretofore as likely to melt, flow, foul the hot forming tools during the heat treatment at temperatures in excess of the zinc melting temperature, and degrade during quenching. Therefore, the coating is applied on the finished part, which necessitates careful cleaning of the surfaces and hollow areas." (Kefferstein et al., col. 1, lines 13 to 24). Kefferstein et al. then suggests that "contrary to preconceived ideas, during heat treatment or temperature rise for hot forming, the coating forms a layer alloying with the steel of the strip and presents then a mechanical resistance such that it prevents the coating material from melting. The resulting compound presents high resistance to corrosion, abrasion, wear and fatigue. The coating does not alter the steel formability properties, thus allowing a wide range of cold and hot forming operations." (Id., col. 2, lines 52 to 59).

Shtikan et al. discloses a continuously operating furnace and method for obtaining a thermal diffusion coating on the outside surface of metallic articles. (See Abstract). In describing thermal diffusion coating processes, Shtikan et al. states that "[u]sually thermal diffusion coating process utilizes zinc diffusion to apply zinc coating on components made of ferrous materials like iron, low-carbon steels, medium carbon and alloy steels, high carbon steels and cast irons ... The components are embedded in finely divided zinc powder and heated to a temperature, corresponding to the point at which zinc melts, usually at 350 to 450 degrees C. Since the component to be coated is covered by zinc powder to provide close intimate contact

therewith, heating up to this temperature is accompanied by diffusion of zinc atoms into the bulk of the object and formation of external coating layer. This layer consists either of pure zinc or of its alloys with the atoms of the host component. The coating is corrosion-resistant; it has good appearance and makes a good paint base. Due to the small dimensional changes involved in this process it is of particular value for the treatment of small parts, e.g., bolts, nuts, bushings, and small hardware articles such as hose clamps and electrical components, etc.” (Col. 1, lines 19 to 30).

1. Independent Claims 10 and 20

Claim 10 recites “[a] process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

forming a component blank from the steel semi-finished product using a cold-forming process, the component blank including a margin contour corresponding approximately to a contour of the press-hardened component and a margin edge;

trimming the component blank at the margin edge to the margin contour;

heating and press-hardening the trimmed component blank using a hot-forming tool; and

covering the press-hardened component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process.”

Claim 20 recites “[a] process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

heating and press-hardening the semi-finished steel product using a hot-forming tool so as to form a press-hardened component blank, having a margin contour corresponding approximately to the press-hardened component and a margin edge;

trimming the press-hardened component blank at the margin edge to the margin contour;

covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process.”

None of the cited references, alone or in combination, discloses the step of “covering the press-hardened component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process” as recited in claim 10 or “covering the press-

hardened, trimmed component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process” of claims 10 and 20. AAPA discloses that a strip coating to prevent corrosion is customarily applied before “the heating and press-hardening” and “trimming” steps of claims 10 and 20. (Present specification, paragraph [0004]).

Kefferstein et al. discloses that conventionally coatings are not applied to a steel sheet until after heat treatment, but in no way teaches or suggests that the steel sheets are trimmed before coating.

The only trimming in Keffertein et al. is done after hot-forming and coating. (e.g., Kefferstein et al., col. 1, line 66 to col. 2, line 13). Shtikan also does not cure this deficiency because Shtikan merely describes a method for obtaining a thermal diffusion coating by heating components to a temperature of 350 to 450 degrees Celsius, but does not disclose that the iron or steel components are press-hardened, trimmed component blanks as required by claims 10 and 20. (Col., lines 19 to 21). Thus, none of the references discloses the “covering” steps of claims 10 and 20.

Moreover, it is respectfully submitted that Shtikan operates at temperatures above those suitable for press-hardened blanks of AAPA and the steel sheets of Kefferstein et al., and it is respectfully submitted that, at the time of the present invention, one of skill in the art would not have modified either of AAPA or Kefferstein et al. in view of Shtikan. At the time of the present invention, one of ordinary skill in the art would not have coated a press-hardened, trimmed steel component blank as required by claims 10 and 20, i.e., a high-strength steel blank, using a thermal diffusion process because such a high-strength steel blank is very temperature sensitive and loses its high strength qualities when heated to temperatures above 320 degrees Celsius. One of ordinary skill in the art would understand from the teachings of Shtikan that it is necessary to heat components to a temperature close to the range of 350 to 450 degrees Celsius, i.e., close to the melting temperature of zinc, for zinc to effectively infiltrate the surface of steel. Therefore, at the time of the present invention, **one of skill in the art would only have found it acceptable to use a thermal diffusion coating before steel had been press hardened**, i.e., before the steel had been strengthened and when the steel was not as temperature sensitive, because coating a high strength steel using thermal diffusion according to the process in Shtikan would produce blanks without the high strength qualities brought about by the press-hardening step.

Based on the foregoing, there is no reason why, at the time of the present invention, it

would have been obvious to one of skill in the art to have applied the thermal diffusion method of Shtikan to a press-hardened, trimmed component blank and it is respectfully submitted that the Examiner's reasoning for combining the references is conclusory and is not sufficiently articulated to support a prima facie case of obviousness.

Reversal of the rejections under 35 U.S.C. §103(a) to claim 10, along with claims 11, 12, 16 to 19 and 30 to 32 depending therefrom, and claim 20, along with claims 21 to 29, 33 and 34 depending therefrom, is respectfully requested.

2. Independent Claim 10: Argued Separately

With further respect to claim 10, it is also respectfully submitted that none of the cited references or the AAPA disclose “trimming the component blank at the margin edge to the margin contour” **before** the blank is “heat[ed] and press-harden[ed]” as required by claim 10 and the Examiner is in clear error for failing to address the specific language of the “trimming” step of claim 10. The Examiner relies on AAPA, specifically the discussion of DE 101 49 221 (also published as U.S. 2003/0066582 A1) at paragraph [0004] of the present application, as disclosing the “trimming” step of claim 10. In DE 101 49 221, a blank is pre-formed and pre-cut prior to hot forming, but the blanket is not trimmed “at the margin edge to the margin contour” as recited in claim 10 until the final contour is provided after hot forming. Thus, the trimming discussed in DE 101 49 221 at paragraph [0004] of the present specification is not the “trimming” step required by claim 10. Claim 7 of U.S. 2003/0066582 A1 clearly illustrates that this pre-cutting trimming is different from the “trimming” step required by claim 10 in the present application. (See U.S. 2003/0066582 A1, claim 7 (“The method of claim 1, and further comprising the step of cutting the sheet metal article in a post-operation.”)). Furthermore, because neither Kefferstein et al. nor Shtikan cures this deficiency of AAPA, “trimming the component blank at the margin edge to the margin contour” **before** the blank is “heat[ed] and press-harden[ed]” as recited claim 10 would not have been obvious to one of skill in the art at the time of the present invention in view of these references.

For this additional reason, reversal of the rejection under 35 U.S.C. 103(a) of claim 10 is respectfully requested.

3. Dependent claims 31 to 34: Argued Separately

Claims 31 and 32 are dependent on claim 10 and claims 33 and 34 are dependent on claim 20.

Claims 31 and 33 recite “wherein the thermal diffusion process including heating the component at 5 to 10 K/min.”

Claims 32 and 34 recite “wherein the thermal diffusion process includes heating the component solely to approximately 300 degrees Celcius.”

It is respectfully submitted that none of the cited references, alone or in combination, discloses or makes obvious “heating the component at 5 to 10 K/min” as recited in claims 31 and 33 or “heating the component solely to approximately 300 degrees Celcius” as recited in claims 32 and 34. In rejecting claims 31 to 34 in the Final Office Action of December 23, 2009, at page 5, the Examiner states:

For claims 31-34, Applicant should note that it is within the general knowledge of one of ordinary skill in the art to choose the optimum parameters of the diffusion process in order to provide an effective corrosion-preventing coating on the press-hardened component blank.

It is respectfully submitted that the Examiner’s finding of obviousness with respect to claims 31 to 34 is conclusory and is not supported by sufficient articulated reasoning. (See MPEP 2142: *KSR International Co. v. Teleflex Inc.*, 383 127 S. Ct. 1727, 1740-41 (2007): “[R]ejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.”) The Examiner completely fails to address the language of claims 31 to 34 or provide any articulated reasoning or evidence to support the Examiner’s apparent (but not even articulated) conclusion that “heating the component at 5 to 10 K/min” as recited in claims 31 and 33 or “heating the component solely to approximately 300 degrees Celcius” as recited in claims 32 and 34 would have been obvious to one of ordinary skill in the art at the time of the present invention. The Examiner does not even provide any articulated reasoning or evidence to support the Examiner’s conclusion that “it is within the general knowledge of one of ordinary skill in the

art to choose the optimum parameter....” Thus, the Examiner has not established a prima facie case of obviousness with respect to any of claims 31 to 34.

For these additional reasons, reversal of the rejection under 35 U.S.C. 103(a) of claims 31 to 34 is respectfully requested.

B. Rejections under 35 U.S.C. §103(a): AAPA, Kefferstein et al., Shtikan et al. and Warichet et al.

Claims 15 and 24 were rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Kefferstein et al., Shtikan et al. and Warichet et al. (US 6,921,439).

Claim 15 is dependent on claim 10 and claim 24 is dependent on claim 20. In view of the above arguments with respect to claims 10 and 20, reversal of the rejection under 35 U.S.C. 103(a) of claims 15 and 24 is respectfully requested.

C. Rejections under 35 U.S.C. §103(a): AAPA, Kefferstein et al., Shtikan et al. and Levinski et al.

Claims 35 to 38 were rejected under 35 U.S.C. §103(a) as being unpatentable over AAPA in view of Kefferstein et al., Shtikan et al. and Levinski et al. (U.S. Patent 6,171,359).

AAPA, Kefferstein et al. and Shtikan et al. are described above. Levinski et al. discloses that a typical sherardizing process includes “preparing of articles surface by chemical or shot blasting treatment; placing of cleaned articles into a drum, filled with zinc powder and inert filler zinc oxide, sand, aluminum oxide and others.” (Col. 1, lines 35 to 44). The sheradizing process then involves “sealing of the drum and heating up to the temperature within the range 380-450 degrees of Celsius and isothermal heating for 1-4 hours.” (Col. 1, lines 44 to 46).

1. Claims 35 and 37: Argued Separately

Claim 35 is dependent on claim 10 and claim 37 is dependent on claim 20.

Claims 35 and 37 both recite “placing the press-hardened, trimmed component blank, a plurality of other press-hardened, trimmed component blanks and a zinc-containing powder into a drum and closing the drum;

introducing the drum to a coating installation; and
heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius
and rotating the drum during the heating.”

It is respectfully submitted that none of the cited references, alone or in combination, discloses or makes obvious “heating the drum at approximately **5 to 10 K/min** to approximately **300 degrees Celsius** and rotating the drum during the heating” as recited in claims 35 and 37. In the Final Office Action of December 23, 2009, at page 5, the Examiner relies on Levinski et al. as disclosing the “heating” step of claim 35 and states:

Regarding the recitation of the drum being heated to approximately to 300 degrees Celsius, Applicant should note that Levinski et al. teaches that the drum could be heated up to the temperature range 380-450 degrees Celsius, which encompasses the claimed 300 degrees Celsius. Also, the isothermal heating for 1-4 hours is structurally equivalent to the claimed heating at approximately 5 to 10 K/min. It is also inherent that the diffusion coated components would be discharged from the coating installation and appropriately cooled in a cooling station as known in the art.

It is respectfully submitted that the Examiner’s conclusion that heating up the drum within the range of 380-450 degrees Celsius at approximately 5 to 10 K/min in Levinski et al.

“encompasses” the step of claims 35 and 37 of “heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius is completely unreasonable. One of ordinary skill in the art would not understand the heating of the drum in Levinski et al. up to between 380 to 450 degrees Celsius as heating “to approximately 300 degrees Celsius” as recited in claims 35 and 37.

Instead, one of ordinary skill in the art would understand “heating the drum . . . to approximately 300 degrees Celsius” as stopping the heating at approximately 300 degrees Celsius and not heating up articles to a temperature within the range of 380 to 450 degrees Celsius as disclosed in Levinski et al. Furthermore, it is respectfully submitted that the “isothermal heating for 1-4 hours” clearly involves heating the articles in the drum at a constant temperature that is between 380 and 450 degrees Celsius for 1-4 hours and not “heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius” as recited in claims 35 and 37. (See <http://www.merriam-webster.com/dictionary/isothermal>: 1: of, relating to, or marked by equality of temperature). Thus, it is respectfully submitted that claims 35 and 37 are not obvious in view of AAPA, Kefferstein et al., Shtikan et al. and Levinski et al.

For these additional reasons, reversal of the rejection under 35 U.S.C. 103(a) of claims 35 and 37 is respectfully requested.

2. Claim 38: Argued Separately

Claim 38 recites “[t]he process as recited in claim 37 wherein after the step of heating the drum, the thermal diffusion process includes the step discharging the drum from the coating installation and conditioning the drum and the press-hardened, trimmed component blanks at a temperature of approximately 200 degrees Celsius for approximately one hour.”

It is respectfully submitted that none of the cited references discloses “conditioning the drum and the press-hardened, trimmed component blanks at a temperature of approximately 200 degrees Celsius for approximately one hour” as recited in claim 38 and the Examiner is in clear error for failing to address this language of claim 38 in the Final Office Action of December 23, 2009.

For this additional reason, reversal of the rejection under 35 U.S.C. 103(a) of claim 38 is respectfully requested.

CONCLUSION

It is respectfully submitted that the application is in condition for allowance. Favorable consideration of this appeal brief is respectfully requested.

Respectfully submitted,

DAVIDSON, DAVIDSON & KAPPEL, LLC

By: _____



William C. Gehris
(Reg. No. 38,156)

DAVIDSON, DAVIDSON & KAPPEL, LLC
485 Seventh Avenue, 14th Floor
New York, NY 10018
Tel: (212) 736-1940
Fax: (212) 736-2427

APPENDIX A:

**PENDING CLAIMS 10 to 12, 15 to 21, 24 to 28 and 31 to 38 of
U.S. APPLICATION SERIAL NO. 10/565,229**

Claim 10 (previously presented): A process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

forming a component blank from the steel semi-finished product using a cold-forming process, the component blank including a margin contour corresponding approximately to a contour of the press-hardened component and a margin edge;

trimming the component blank at the margin edge to the margin contour;

heating and press-hardening the trimmed component blank using a hot-forming tool; and

covering the press-hardened component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process.

Claim 11 (previously presented): The process as recited in claim 10, wherein the press-hardened component is a bodywork component.

Claim 12 (previously presented): The process as recited in claim 10, wherein the cold-forming process includes a drawing process.

Claim 15 (previously presented): The process as recited in claim 10, further comprising cleaning the press-hardened component blank by dry cleaning prior to the coating step.

Claim 16 (previously presented): The process as recited in claim 10, further comprising blasting

the press-hardened component blank with particles prior to the coating step.

Claim 17 (previously presented): The process as recited in claim 16, wherein the particles include glass particles.

Claim 18 (previously presented): The process as recited in claim 10, further comprising removing residues from the coating step from the coated component blank after the coating step.

Claim 19 (previously presented): The process as recited in claim 10, further comprising conditioning the coated component blank after the coating step.

Claim 20 (previously presented): A process for producing a press-hardened component from a semi-finished product made of unhardened, hot-formable steel sheet, the process comprising:

heating and press-hardening the semi-finished steel product using a hot-forming tool so as to form a press-hardened component blank, having a margin contour corresponding approximately to the press-hardened component and a margin edge;

trimming the press-hardened component blank at the margin edge to the margin contour;

covering the press-hardened, trimmed component blank with a corrosion-prevention layer in a coating step, wherein the coating step includes a thermal diffusion process.

Claim 21 (previously presented): The process as recited in claim 20, wherein the press-hardened component is a bodywork component.

Claim 24 (previously presented): The process as recited in claim 20, further comprising cleaning the press-hardened component blank by dry cleaning prior to the coating step.

Claim 25 (previously presented): The process as recited in claim 20, further comprising blasting the press-hardened component blank with particles prior to the coating step.

Claim 26 (previously presented): The process as recited in claim 25, wherein the particles include glass particles.

Claim 27 (previously presented): The process as recited in claim 20, further comprising removing residues from the coating step from the coated component blank after the coating step.

Claim 28 (previously presented): The process as recited in claim 20, further comprising conditioning the coated component blank after the coating step.

Claim 31 (previously presented): The process as recited in claim 10 wherein the thermal diffusion process including heating the component at 5 to 10 K/min.

Claim 32 (previously presented): The process as recited in claim 10 wherein the thermal diffusion process includes heating the component solely to approximately 300 degrees Celcius.

Claim 33 (previously presented): The process as recited in claim 20 wherein the thermal diffusion process including heating the component at 5 to 10 K/min.

Claim 34 (previously presented): The process as recited in claim 20 wherein the thermal diffusion process includes heating the component solely to approximately 300 degrees Celcius.

Claim 35 (previously presented): The process as recited in claim 10 wherein the thermal diffusion process includes the steps of:

placing the press-hardened, trimmed component blank, a plurality of other press-hardened, trimmed component blanks and a zinc-containing powder into a drum and closing the drum;

introducing the drum to a coating installation; and

heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius and rotating the drum during the heating.

Claim 36 (previously presented): The process as recited in claim 35 wherein after the step of heating the drum, the thermal diffusion process includes the step discharging the drum from the coating installation and cooling the drum in a cooling station.

Claim 37 (previously presented): The process as recited in claim 20 wherein the thermal diffusion process includes the steps of:

placing the press-hardened, trimmed component blank, a plurality of other press-hardened, trimmed component blanks and a zinc-containing powder into a drum and closing the drum;

introducing the drum to a coating installation; and

heating the drum at approximately 5 to 10 K/min to approximately 300 degrees Celsius and rotating the drum during the heating.

Claim 38 (previously presented): The process as recited in claim 37 wherein after the step of heating the drum, the thermal diffusion process includes the step discharging the drum from the coating installation and conditioning the drum and the press-hardened, trimmed component blanks at a temperature of approximately 200 degrees Celsius for approximately one hour.

APPENDIX B

Evidence Appendix under 37 C.F.R. §41.37 (c) (ix):

No evidence pursuant to 37 C.F.R. §§1.130, 1.131 or 1.132 and relied upon in the appeal has been submitted by appellants or entered by the examiner.

APPENDIX C

Related proceedings appendix under 37 C.F.R. §41.37 (c) (x):

As stated in “2. RELATED APPEALS AND INTERFERENCES” of this appeal brief, appellants, their legal representatives, and assignee are not aware of any appeal or interference that directly affects, will be directly affected by, or will have a bearing on the Board’s decision in this appeal.